

AMENDMENT OF THE DRAWINGS

The attached sheets of drawings include changes to Figs. 1, 2 and 5. These sheets, which includes Figs. 1, 2, 4 and 5, replace the original sheets including those same Figures.

The reference numerals in Figs 1, 2 and 5 have been changed to correspond to the reference numerals used to describe these figures in the main body of the specification. Also, element 403c has been properly labeled in Fig. 5, as described in paragraph [051] of the main body of the specification.

Attachment: Replacement Sheet
 Annotated Sheet Showing Changes

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-29 are now present in this application. Claims 1, 10 and 18 are independent. Claims 26-29 are added. No new matter is involved.

Amendments have been made to the Claims and to the Drawings.

Reconsideration of this application, as amended, is respectfully requested.

INCOMPLETE OFFICE ACTION

Claims 1-29 are pending in this Application. Unfortunately, the outstanding Office Action only treats some of the pending claims, i.e., claims 1-9, contrary to the explicit requirements of 37 CFR §1.104 and MPEP §707.07, which require an Office Action be complete as to all matters. Applicants respectfully submit that claims 1-29 are pending and that all pending claims at the time the Office Action was prepared and mailed, i.e., claims 1-25, should have been treated in the outstanding Office Action.

The Outstanding Office Action does not treat claims 10-25 at all. Moreover, MPEP §707.07(f) requires that Applicants' grounds of traversal must be taken note of and the substance of those arguments be answered. In this

regard, Applicants respectfully submit that Applicants filed a four-page Response to Restriction Requirement dated September 2, 2005, traversed the merits of the restriction requirement made in the previous Office Action, dated August 2, 2005.

The outstanding Office Action fails to comply with this explicit requirement of the MPEP, thereby denying Applicants the substantive and procedural due process to which they are entitled under the Administrative Procedures Act. See in this regard, In re Zurko, 119 S.Ct. 1816, 50 USPQ2d 1930 (1999), and In re Gartside, 53 USPQ2d 1769 (Fed. Cir. 2000).

Furthermore, MPEP §707.07(e) indicates that every point in the prior action of an Examiner, which is still applicable, must be repeated or referred to, to prevent implied waiver of the requirement.

Accordingly, Applicants consider that the previous restriction/election requirement has been impliedly withdrawn and that, by the outstanding Office Action not treating claims 10-25 on their merits, Applicants have been denied the substantive and procedural due process to which they are entitled.

Under the circumstances, Applicants respectfully request that the outstanding, incomplete, Office Action be withdrawn and a new, complete, ~~non-final~~, Office Action be prepared and mailed which treats claims 10-25 on their merits along with elected claims 1-9.

DRAWING AMENDMENTS

Applicants have amended Figs. 1 and 20 to make the reference numerals in those figures correspond to the reference numerals used in the main body of the specification to describe Figs. 1 and 2. Fig. 5 has been amended to add a reference numeral 403c and a lead line to show this feature as described in paragraph [051] of the main body of the specification.

RESPONSE TO THE REJECTIONS UNDER 35 U.S.C. § 103

Claims 1 and 6 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 5,793,457 to Tamai et al. ("Tamai"). This rejection is respectfully traversed.

The Office Action asserts that Tamai '457 discloses a black matrix layer having a first opening on a substrate, in the form of opaque layer 3 and the first step of methods 1-4 disclosed by Tamai '457. Applicants respectfully disagree with this assertion. Tamai '457's light shielding films 3 are not disclosed as black matrix layers. It is Applicants' understanding that black matrix layers are provided for enhanced viewing of Active Matrix LCDs (AMLCDs), whereas black matrix layers are not need for, or provided for, passive LCDs like ferroelectric LCDs like those disclosed by Tamai '457. It is Applicants' understanding that Active Matrix LCDs, especially color modules, transmit much less of the incident light and require more elaborate backlighting systems than do passive

LCDs, because an active matrix TFT display has metal lines and transistor elements that are not transparent and block a significant percentage of light. In order to obtain higher viewing contrast, these AMLCDs incorporate what is called a black matrix. This is a black film that surrounds the pixel elements to yield higher contrast.

Applicants respectfully submit that Tamai '457's light-shielding layers 3 are not black and are primarily provided not for increasing the viewed contrast of the display, but for forming manufacturing the display, as disclosed throughout Tamai '457. In this regard, please note that Tamai '457 only included manufacturing method claims and that the Summary of the Invention portion of Tamai '457 is devoted to three manufacturing methods.

In view of these remarks, Applicants respectfully submit that the Office Action has not provided objective factual evidence that Tamai '457's passive ferroelectric LCDs have a black matrix at all, or that light-shielding films constitute a black matrix, as recited.

In addition to this lack of disclosing a black matrix as recited, Tamai '457 admittedly lacks the step of forming a color filter layer on the substrate.

In an attempt to remedy this admitted deficiency in Tamai '457, the Office Action states that it is notoriously well known to form a color filter between black masks in order to create a color display and it would be obvious to combine the well known color filter.

Applicants respectfully submit that forming a color filter between black masks is irrelevant to Tamai '457, which has not been shown to disclose a black matrix, and is irrelevant to the claimed invention, which positively recites, among other features, forming a color filter layer on the substrate on which the black matrix is formed.

Moreover, Tamai '457 discloses that color filters of prior art ferroelectric LCDs are stacked on transparent electrodes and used as photomasks, and are used the same way in its invention. See, in this regard, col. 2, lines 37-56, and col. 4, lines 51-60. In other words, Tamai '457 does not disclose forming a color filter layer on the same substrate on which their electrodes are formed. Instead, Tamai '457's electrodes are formed on a substrate and Tamai '457's filters are then formed on the electrodes, not on the substrate on which the electrodes are formed.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention based on Tamai '457.

Reconsideration and withdrawal of this rejection of claims 1 and 6 are respectfully requested.

Claims 1 and 4 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 5,880,803 to Tamai et al. et al. ("Tamai"). This rejection is respectfully traversed.

The Office Action asserts that Tamai '803 discloses a black matrix layer having a first opening on a substrate, in the form of opaque layer 3 and the first step of methods 1-4 disclosed by Tamai '803. Applicants respectfully disagree with this assertion. Tamai '803's light shielding films 3 are not disclosed as black matrix layers. It is Applicants' understanding that black matrix layers are provided for enhanced viewing of Active Matrix LCDs (AMLCDs), whereas black matrix layers are not need for, or provided for, passive LCDs like ferroelectric LCDs like those disclosed by Tamai '803. It is Applicants' understanding that Active Matrix LCDs, especially color modules, transmit much less of the incident light and require more elaborate backlighting systems than do passive LCDs, because an active matrix TFT display has metal lines and transistor elements that are not transparent and block a significant percentage of light. In order to obtain higher viewing contrast, these AMLCDs incorporate what is called a black matrix. This is a black film that surrounds the pixel elements to yield higher contrast.

Applicants respectfully submit that Tamai '803's light-shielding layers 3 are not black and are primarily provided not for increasing the viewed contrast of the display, but for forming manufacturing the display, as disclosed throughout Tamai '803. In this regard, please note that Tamai '803 only included manufacturing method claims and that the Summary of the Invention portion of Tamai '803 is devoted to three manufacturing methods.

In view of these remarks, Applicants respectfully submit that the Office Action has not provided objective factual evidence that Tamai '803's passive ferroelectric LCDs have a black matrix at all, or that light-shielding films constitute a black matrix, as recited.

In addition to this lack of disclosing a black matrix as recited, Tamai '803 admittedly lacks the step of forming a color filter layer on the substrate.

In an attempt to remedy this admitted deficiency in Tamai '803, the Office Action states that it is notoriously well known to form a color filter between black masks in order to create a color display and it would be obvious to combine the well known color filter.

Applicants respectfully submit that forming a color filter between black masks is irrelevant to Tamai '803, which has not been shown to disclose a black matrix, and is irrelevant to the claimed invention, which positively recites, among other features, forming a color filter layer on the substrate on which the black matrix is formed.

Moreover, Tamai '803 is totally devoid of any disclosure of color filters in its ferroelectric LCDs and how they are employed in its ferroelectric LCDs.

Furthermore, Tamai '803 does not disclose forming a color filter layer on the same substrate on which its electrode are formed, as recited.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention based on Tamai '803.

Reconsideration and withdrawal of this rejection of claims 1 and 4 are respectfully requested.

Claims 1 and 5 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Application Publication US 2005/0099580 to Lee et al. ("Lee") in view of Tamai '803. This rejection is respectfully traversed.

Lee only qualifies as prior art under 35 U.S.C. § 102(e). Thus, the basis for this rejection is actually 35 U.S.C. §§ 102(e)/103(a). Moreover, Lee is assigned to LG. Philips LCD Co., Ltd, as is the instant patent Application. In other words, this Application and Lee are commonly assigned.

Furthermore, it is respectfully submitted that, this Application, Serial No. 10/825,414 and U.S. Patent Application Publication US 2005/0099580 were, at the time the invention of this Application was made, owned by LG. Philips LCD CO., Inc.

Accordingly, Lee is not prior art to Applicant under 35 U.S.C. § 102(e) and to the extent that this rejection is based on Lee, this rejection is improper and must be withdrawn.

Furthermore, Applicants respectfully submit that the Office Action does not make out a *prima facie* case of proper motivation to modify Lee in view of Tamai '803, as suggested.

Firstly, the Office Action never states how Lee is to be modified by Tamai '803. All the Office Action states is that it would be obvious to combine Tamai '803 with Lee, leaving the exact modification of Lee unexplained.

Secondly, the Office Action never explains what Tamai '803's electrodes 2a and light shielding films 3a in its ferroelectric LCD have to do with a black matrix for an active matrix LCD.

Thirdly, the Office Action does not explain how Tamai '803's method of forming spacers would work with Lee's Active Matrix LCD that has TFTs and data lines and gate lines on its substrate.

Accordingly, even if Lee were prior art to Applicant, which the office Action has not established, the Office Action also has not provided objective factual evidence that a skilled worker would be motivated to modify Lee in view of Tamai '803, as suggested.

Accordingly, the Office Action fails to make out a *prima facie* case of obviousness of the claimed invention based on Lee and Tamai '803.

Reconsideration and withdrawal of this rejection of claims 1 and 5 are respectfully requested.

NEW CLAIMS

Claims 26-29 are added. Basis for these claims is found throughout Applicants' originally filed disclosure, which makes it clear that Applicants'

photomask is part of the device itself, i.e., is the black matrix itself. Applicants do not disclose, for example a separate, external photomask, as does Tamai '457 (see element 24 of Tamai '457.

Applicants respectfully submit that none of the applied prior art discloses or suggests the features recited in claims 26-29. As noted above, Tamai '457 uses a separate photomask 24, and Tamai '803 does not appear to disclose back-exposing.

ALLOWABLE SUBJECT MATTER

Applicants acknowledge with appreciation the indication of allowable subject matter in claims 2, 3 and 7-9. Applicants have not re-written claims 2, 3 and 7-9 in independent form at this time, however, because of Applicants' belief that claim 1, from which these claims depend, are allowable and, thus, claims 2, 3 and 7-9 are allowable in their present form.

Because the remaining references cited by the Examiner have not been utilized to reject the claims, but have merely been cited to show the state of the art, no comment need be made with respect thereto.

CONCLUSION

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be withdrawn, and that a new, ~~non-final~~, Office Action be mailed that treats all pending claims 1-25. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

Favorable action on the present application is earnestly solicited.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Robert J. Webster, Registration No. 46,472, at (703) 205-8000, in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachments: Replacement Drawing Sheets and Annotated Drawing Sheets

FIG. 1
RELATED ART

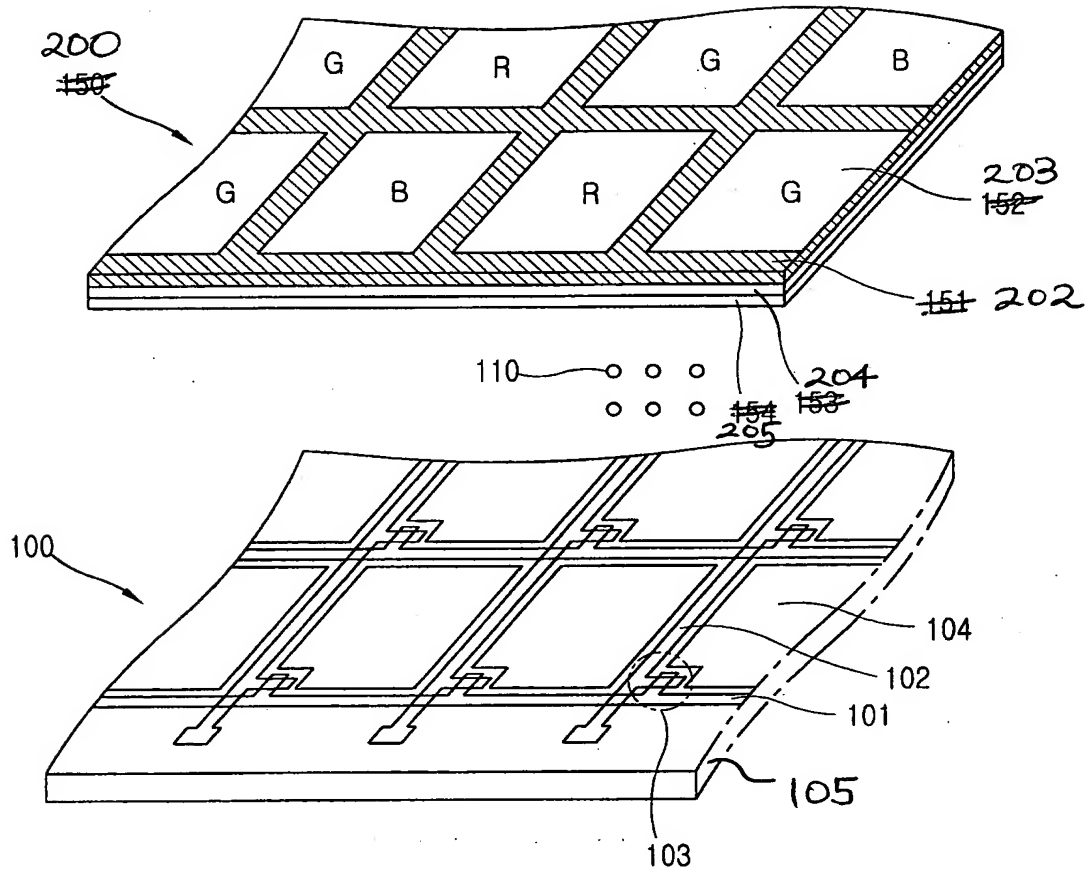


FIG. 2
RELATED ART

